

REPLACEMENT SHEET

```
enqueue( queue i)
{
    if(enqueue_count == dequeue_count)          // check #1
    {
        LESiN = CDSN;                  // queue is empty
    }
    else if(((CDSN - LESiN) mod N) < M) // check #2
    {
        LESiN = CDSN;                  // queue is empty and dequeue count is lagging
    }

    LESiN = (LESiN + j) mod N;           // calculate where to enqueue the packet
                                                // value j < M depends on queuing scheme
                                                // Note: LESiN increases, CDSN unchanged
    if(((CDSN - LESiN) mod N) < M) // check #3
    {
        Drop packet                         // queue has overflowed
        LESiN = (LESiN - j) mod N; // reset LESi to old value
    }
    else
    {
        Enqueue the packet
    }
}

while (1)
{
    enqueue(i);                          // call enqueue routine for queue i
                                            // value LESi may increase
    Perform some dequeues
    Perform enqueues on other queues
    CDSN = (CDSN + l) mod N;         // l depends on how many rounds
                                            // have completed dequeues
                                            // Note: LESiN unchanged, CDSN increases
}
```

FIG. 6